

CLAIMS

What is claimed:

1. A hand-held pick-and-place apparatus, comprising:
a body configured to be grasped by a hand of an individual;
a grasping element associated with an end of said body and including an end for adhesion to a piece to be picked while leaving substantially no residue on said piece.
2. The hand-held pick-and-place apparatus of claim 1, wherein said body includes a chamber for receiving at least a portion of said grasping element.
3. The hand-held pick-and-place apparatus of claim 1, further comprising:
a tip securable to said body, said tip including at least one channel through at least a portion of a length thereof, said at least one channel being configured to receive at least a portion of said grasping element, said end for adhesion exposable through an end of said tip.
4. The hand-held pick-and-place apparatus of claim 3, wherein said tip is configured to move longitudinally to a plurality of positions relative to said body to facilitate at least one of exposure and storage of said grasping element.
5. The hand-held pick-and-place apparatus of claim 4, wherein a tip-engagement element of body and a body-engagement element of tip include complementary threading.
6. The hand-held pick-and-place apparatus of claim 5, further comprising:
a cap configured to receive at least said end for adhesion of said grasping element and to be secured to said tip.
7. The hand-held pick-and-place apparatus of claim 6, wherein said cap is configured to be secured to said tip such that rotation of said cap results in rotation of said tip.

8. The hand-held pick and place apparatus of claim 4, further comprising a plunger including a tip positioned coaxially within said body and configured to be positioned in-line with said at least one channel of said tip for insertion therein.

9. The hand-held pick-and-place apparatus of claim 4, further comprising: an interior fixed element within said body which limits a distance said tip may be inserted into a chamber of said body.

10. The hand-held pick-and-place apparatus of claim 1, further comprising: a cap configured to receive at least said end for adhesion of said grasping element and to be secured in place relative to said body.

11. The hand-held pick-and-place apparatus of claim 1, further comprising: an accessory tool configured to be secured to another end of said body.

12. The hand-held pick-and-place apparatus of claim 11, wherein at least a portion of said accessory tool is configured to be received by said another end of said body.

13. The hand-held pick-and-place apparatus of claim 11, wherein said accessory tool includes a portion which is configured to be grasped by a hand of the individual.

14. The hand-held pick-and-place apparatus of claim 11, wherein said accessory tool includes a tool comprising at least one of a rounded stylus, a placement tip, tweezers, a ball point, an adhesive applicator, a brush, a scraper, a cutting blade, a poker, and a writing or marking instrument.

15. The hand-held pick-and-place apparatus of claim 11, wherein said accessory tool includes at least two tools which extend in opposite directions.

16. The hand-held pick-and-place apparatus of claim 15, wherein at least one of said at least two tools is configured to be at least partially received within a chamber of said body that communicates with said another end.

17. The hand-held pick-and-place apparatus of claim 15, wherein at least one of said at least two tools is configured to be removed from a center section of said accessory tool.

18. An adhesive tip for a hand-held pick-and-place apparatus, comprising:
a tip including:
a body-engagement element configured to be secured to a body of the hand-held pick-and-place apparatus; and
at least one channel extending longitudinally through at least a portion of said tip;
and
a grasping element disposed at least partially within said at least one channel.

19. The adhesive tip of claim 18, wherein at least one of said end of said grasping element protrudes from said body-engagement element.

20. A method for moving a piece, comprising:
contacting the piece with an exposed exterior end of a grasping element associated with a hand-held pick-and-place apparatus so as to cause said exposed exterior end to adhere to the piece; and
moving said hand-held pick-and-place apparatus while the piece remains adhered to said exposed exterior end.

21. The method of claim 20, further comprising:
providing at least a portion of a grasping element at an end of said hand-held pick-and-place apparatus.

22. The method of claim 21, wherein said providing comprises extruding a portion of said grasping element from a tip of said hand-held pick-and-place apparatus to expose an exterior end of said grasping element.

23. The method of claim 22, wherein said extruding comprises rotating said tip of said hand-held pick-and-place apparatus relative to a body thereof.

24. The method of claim 23, wherein said rotating comprises rotating a cap secured to said tip.

25. The method of claim 21, further comprising:
forming at least said portion of said grasping element to a desired shape.

26. The method of claim 20, further comprising:
holding said hand-held pick-and-place apparatus at an orientation that provides access to a surface of the piece.

27. The method of claim 26, further comprising:
applying material to said surface of the piece while the piece is adhered to said exposed exterior end.

28. The method of claim 26, further comprising:
manipulating or modifying the piece while the piece is adhered to said exposed exterior end.

29. The method of claim 20, further comprising:
moving the piece to a desired location of a substrate; and
placing the piece at said desired location.

30. The method of claim 29, further comprising:
separating an accessory tool from said hand-held pick-and-place apparatus;

positioning a placement tip of said accessory tool against the piece; and
pulling said hand-held pick-and-place apparatus away from the piece while said placement tip is
positioned against the piece.

31. The method of claim 30, further comprising:
placing a rounded stylus against the piece; and
moving said rounded stylus laterally across at least a portion of a surface of the piece to secure
the piece to said substrate.

32. The method of claim 31, wherein said placing is effected by repositioning said
accessory tool.

33. A method for using a hand-held pick-and-place apparatus, comprising:
grasping the hand-held pick-and-place apparatus; and
ensuring that an end of a grasping element of the hand-held pick-and-place apparatus is exposed
from an end thereof.

34. The method of claim 33, wherein said ensuring comprises extruding said end of
said grasping element from said end of the hand-held pick-and-place apparatus.

35. The method of claim 34, wherein said extruding comprises moving a tip of the
hand-held pick-and-place apparatus longitudinally into a body thereof, said grasping element
remaining in a substantially stationary position relative to said body.

36. The method of claim 34, wherein said extruding comprises moving a position of
said grasping element within the hand-held pick-and-place apparatus toward said end thereof.

37. The method of claim 33, wherein said ensuring comprises supplying the
hand-held pick-and-place apparatus with a replacement grasping element.

38. The method of claim 34, wherein said supplying comprises:
removing a tip of the hand-held pick-and-place apparatus from a body thereof.

39. The method of claim 38, wherein said supplying further comprises:
placing said replacement grasping element at least partially within said tip; and
resecuring said tip to said body.

40. The method of claim 38, wherein said supplying further comprises:
securing a replacement tip including a replacement grasping element to said body.